

## REMARKS

Applicants respectfully request reconsideration of this application, and reconsideration of the Office Action dated March 14, 2005. Upon entry of this Amendment, claims 1, 3, 4, 6-9, 11-14, and 16 will remain pending in this application. Claims 2, 5, 10, 15, and 17 are canceled and new claim 18 is added. The amendments to the claims and the newly added claim are supported by the specification and original claims. No new matter is incorporated by this Amendment.

\* \* \* \* \*

Claims 1, 2, and 4-10 are rejected under 35 U.S.C. § 102(b) as purportedly anticipated by Tatch (U.S. Pat. No. 6,220,765). The Office Action asserts Tatch discloses each feature of these claims. Applicants respectfully traverse.

Independent claim 1, from which claims 4 and 6-9 depend, concerns an optical module. The module includes a body including a semiconductor light-emitting element, an optical component including a nonmetallic ferrule and a metallic holder for securing a part of the ferrule, and a metallic sleeve positioned to the body. The sleeve secures a part of the holder to position the holder relative to the body. The metallic holder has a tubular shape. Moreover, the metallic holder is welded to the metallic sleeve and the sleeve is welded to the body.

The Tatch patent is owned by the assignee of the present application. According to the inventors and owner, Tatch describes an external optical fiber which, after being inserted into a zirconia ceramic ferrule, is obliquely polished at an angle of 8 degrees. Tatch teaches that polishing the fiber reduces the influence of light reflection from the end face of the optical fiber upon LD element 6. Tatch further teaches that an external sleeve made of Fe-Ni alloy is inserted between the optical fiber and the container. The external sleeve also is secured to the zirconia ceramic ferrule, an isolator, and a lens on which a cylindrical sleeve also made of an Fe-Ni alloy is affixed. Tatch teaches that all of these

are assembled by YAG welding after they are mutually aligned so that a maximum amount of light can enter the optical fiber.

Tatoh fails to teach or fairly suggest employing a metallic holder for securing a part of the ferrule or that the metallic holder has a tubular shape. Tatoh also fails to teach or fairly suggest welding the metallic holder to the metallic sleeve or welding the sleeve to the body. Accordingly, Tatoh fails to teach or fairly suggest each and every feature of independent claim 1. Applicants submit that the combination of the metallic holder and the metallic sleeve facilitates the optical alignment and YAG laser welding after the optical alignment. Hence, since Tatoh fails to teach or fairly suggest every feature of claim 1, Tatoh cannot anticipate the claimed invention.

In view of the above remarks, Applicants submit this rejection is overcome and request it be withdrawn.

\* \* \*

Claims 1, 2, and 5-17 are rejected under 35 U.S.C. § 102(e) as purportedly anticipated by Takagi et al. (U.S. Pat. No. 6,786,627).

Claim 3 is rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Takagi et al.

These two rejections are addressed together as similar issues apply to both. Moreover, Applicants respectfully traverse.

The application that issued as the Takagi patent was filed with the U.S. PTO on September 20, 2002. In this case, Applicants claim priority from JP2002-226364 back to August 2, 2002. This is over 1 ½ months before the filing date of the Takagi patent. To remove Takagi as a reference, Applicants hereby provide a translation of their priority Japanese application JP2002-226364. The claimed subject matter of the present application is fully supported by the translated priority application. Hence, both rejections are overcome and Applicants request they both be withdrawn.

\* \* \*

Claim 3 is rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Tatch '765 in view of Tatch (U.S. Pat. No. 6,163,072).

Claims 11-17 are rejected under 35 U.S.C. § 103(a) as purportedly obvious based on Tatch in view of Hakogi et al. (U.S. Pat. No. 6,135,644).

These two rejections are also addressed together as similar issues apply to both. Moreover, Applicants respectfully traverse both of these rejections.

Claims 3, 11-14 and 16 depend from independent claim 1. The deficiencies of Tatch '765 with respect to claim 1 are discussed above. Neither Tatch '072 nor Hakogi remedies these deficiencies. None of the cited patents teach or fairly suggest employing a metallic holder for securing a part of the ferrule, that the metallic holder has a tubular shape, welding the metallic holder to the metallic sleeve, or welding the sleeve to the body.

In addition, with respect to claim 3, neither Tatch patent teaches or fairly suggests a ferrule that includes a first portion having a first diameter and a second portion having a second diameter smaller than the first diameter or that the holder secures the second portion of the ferrule. Ferrule 61 in Tatch '072 does not have a first portion having a first diameter and a second portion having a second diameter that is smaller than the first diameter. Moreover, holder 58, as disclosed in Tatch '072, holds a lens and is thus different from the metallic holder of the claimed invention.

With respect to claims 11-14 and 16, Hakogi discloses an optical connector (114) and a ferrule (220) of an optical connector module (200). In the optical connector module (200), the housing (210) of resin holds the ferrule (220) and is formed after the optical alignment of the ferrule with a semiconductor optical device for the optical connector module. The ferrule in Hakogi is thus different from the ferrule of the present claims. The presently claimed invention includes a metallic holder that has a tubular shape and secures a part of the ferrule. Hence, as stated above, even when combined, the cited patents fail to teach or fairly suggest each and every feature of the claimed invention. Moreover, there is

nothing in the combined teachings of the cited patents which would motivate those of ordinary skill to employ the above described features of the claimed invention.

In view of the above remarks, Applicants submit both rejections are overcome and request they both be withdrawn..

\* \* \* \* \*

Applicants respectfully submit that this Amendment and the above remarks obviate the outstanding rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C.F.R. §§1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 033035.129.

If an extension of time under 37 C.F.R. §1.136 is necessary that is not accounted for herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300; Order No. 033035.129.

Respectfully submitted,  
SMITH, GAMBRELL & RUSSELL, LLP

By:



Michael A. Makuch, Reg. No. 32,263  
1850 M Street, N.W., Suite 800  
Washington, D.C. 20036  
Telephone: (202) 263-4300  
Facsimile: (202) 263-4329

Dated: August 15, 2005